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PTO/SB/21 (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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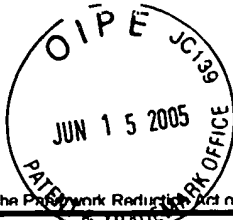
TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/715,319	
	Filing Date	Nov. 17, 2003	
	First Named Inventor	Fred D. LANG	
	Group Art Unit	2857	
	Examiner Name	Manuel L. BARBEE	
Total Number of Pages in This Submission	7 + 4 Ref.	Attorney Docket Number	11700

ENCLOSURES (check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form <input checked="" type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement 2 Pages SB08 + 4 bound ref. <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/ Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for a Patent) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Letter, Pages 2. Cert. of Mailing & Post Card.
Remarks Note: PTO forms plus letter are 7 pages. Also enclosed are 2 documents plus 2 foreign patents: 4 total bound references. Please expedite this transmittal to the examiner.		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	FRED D LANG, pro se Applicant
Signature	
Date	JUNE 14, 2005

CERTIFICATE OF TRANSMISSION			
I hereby certify that this correspondence is being deposited with FedEx addressed to: Patent & Trademark Office, 220 20th Street South, Customer Window, Mail Stop Amendment, Crystal Plaza Two, Lobby, Rm 1B03, Arlington, VA, 22202 6/14/2005			
Typed or printed name	FRED D LANG		
Signature		Date	6/14/2005

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



PTO/SB/17 (12-04v2)

Approved for use through 07/31/2006. OMB 0651-0032

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Effective on 12/08/2004.
Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).**FEE TRANSMITTAL**
For FY 2005☒ Applicant claims small entity status. See 37 CFR 1.27**TOTAL AMOUNT OF PAYMENT** (\$) 180.00**Complete if Known**

Application Number	10/715,319
Filing Date	Nov. 17, 2003
First Named Inventor	Fred D. LANG
Examiner Name	Manuel L. BARBEE
Art Unit	2857
Attorney Docket No.	11700

METHOD OF PAYMENT (check all that apply)☒ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): _____☐ Deposit Account Deposit Account Number: _____ Deposit Account Name: _____

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee
☐ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 ☐ Credit any overpayments**WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**FEE CALCULATION****1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	_____
Design	200	100	100	50	130	65	_____
Plant	200	100	300	150	160	80	_____
Reissue	300	150	500	250	600	300	_____
Provisional	200	100	0	0	0	0	_____

2. EXCESS CLAIM FEES

Fee Description	Fee (\$)	Small Entity Fee (\$)
Each claim over 20 (including Reissues)	50	25
Each independent claim over 3 (including Reissues)	200	100
Multiple dependent claims	360	180

Total Claims	Extra Claims	Fee (\$)	Fee Paid (\$)	Multiple Dependent Claims
- 20 or HP = _____	x _____	= _____		Fee (\$) Fee Paid (\$)

HP = highest number of total claims paid for, if greater than 20.

Indep. Claims	Extra Claims	Fee (\$)	Fee Paid (\$)
- 3 or HP = _____	x _____	= _____	

HP = highest number of independent claims paid for, if greater than 3.

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
- 100 = _____	/ 50 = _____	(round up to a whole number) x _____	= _____	

4. OTHER FEE(S)

Non-English Specification, \$130 fee (no small entity discount)		Fees Paid (\$)
Other (e.g., late filing surcharge): _____	Submission of IDS (Fee Code 1806)	\$180.00

SUBMITTED BY

Signature		Registration No. (Attorney/Agent)	Telephone 415-455-0100
Name (Print/Type)	FRED D. LANG, pro se Applicant		Date June 14, 2005

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In regards	Application of Fred D. Lang)	GAU: 2857
Serial No.	10/715,319)	Examiner:
Filing Date	November 17, 2003)	Manuel L. Barbee
Title:	METHOD FOR DETECTING HEAT)	
	EXCHANGER TUBE FAILURES AND)	
	THEIR LOCATION WHEN USING)	
	INPUT/LOSS PERFORMANCE)	Date of Submittal:
	MONITORING OF A RECOVERY BOILER)	June 14, 2005

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 Crystal Plaza Two, Lobby, Room 1B03
 Arlington, VA 22202

06/17/2005 HALI11 00000062 10715319

01 FC:1806

180.00 DP

INFORMATION DISCLOSURE STATEMENT

Sir:

Applicant herein submits four (4) references that may be material to the examination of this application. Copies of these references are herein enclosed for the convenience of the Examiner. These references are cited on PTO/SB08 forms, attached. All references are in English.

A previously submitted IDS of January 14, 2005 cited 18 references, and enclosed 16 physical documents. Two of these references were omitted from the physical submittal, now being enclosed herein. The other two references were foreign patents, also omitted from the January 14 submittal. Note the two foreign patents, both granted to this applicant, derived from a PTC application based on U.S. Patent Application Serial Number 09/273,711 filed March 22, 1999, which issued on February 18, 2003 as U.S. Patent 6,522,994. The present application is a Continuation-In-Part of 09/273,711.

The applicant asks that the Examiner consider these references, and make them of record in the prosecution history.

Should you have any questions please call me at any time at 415-455-0100.

Sincerely,

A handwritten signature in cursive script, appearing to read "Fred D. Lang".

Fred D. Lang,

pro se Applicant, and Inventor
of Application 10/715,319.

USPTO Customer No. **40088**.

12 San Marino Drive

San Rafael, CA 94901

Phone: (415) 455-0100

FAX: (415) 455-0215

E-mail: Lang@ExergeticSystems.com



Substitute for form 1041/PTO

(Use as many sheets as necessary)

Sheet	1	of	2
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Complete if Known

Application Number	10/715,319
Filing Date	Nov. 17, 2003
First Named Inventor	Fred D. LANG
Art Unit	2857
Examiner Name	Manuel L. BARBEE
Attorney Docket Number	11700

U. S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				
		Australia, 762836	10/23/2003	Fred D. Lang	Both resultant	
		Canada, 2325929	6/08/2004	Fred D. Lang	from PCT filing	
					of 09/273711	
					(becoming	
					US-6522994).	

Examiner Signature		Date Considered	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ² Applicant's unique citation designation number (optional). ³ See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ⁴ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁵ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁶ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁷ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Complete if Known			
		Application Number	10/715,319		
		Filing Date	Nov. 17, 2003		
		First Named Inventor	Fred D. LANG		
		Art Unit	2857		
		Examiner Name	Manuel L. BARBEE		
Sheet	2	of	2	Attorney Docket Number	11700

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		American Society of Mechanical Engineers' (ASME) Performance Test Code (PTC) 4.1.	
		American Society of Mechanical Engineers' (ASME) Performance Test Code (PTC) 4.	

Examiner Signature		Date Considered	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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CERTIFICATION OF MAILING UNDER 37 C.F.R. §1.8

I hereby certify that this correspondence and the documents, papers and/or fees referred to as attached therein are being deposited with Federal Express service on **June 14, 2005**, under 37 CFR 1.8, FedEx tracking number **8500-1545-6746** addressed to the:

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FRED D. LANG, Applicant

Name of Person This Mailing

Signature of Person This Mailing

Docket No.: 11700
Application No.: 10/715,319
Inventor & Appl.: Fred D. Lang
Title: METHOD FOR DETECTING HEAT EXCHANGER TUBE
FAILURES AND THEIR LOCATION WHEN USING INPUT/LOSS
PERFORMANCE MONITORING OF A RECOVERY BOILER

Total = 7 pages of forms & letter + 4 bound references:

- ___ Transmittal Form, Pages 1
 - ___ Fee Transmittal with Fee of \$180 by check #1756; Pages 1
 - ___ Letter; Pages 2.
 - ___ Information Disclosure Statements by Applicant, PTO/SB/08; Pages 2.
 - ___ this Certificate of Mailing w/Postcard for return receipt; Pages 1.
- Four (4) bound references: